IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

287 FBT 03.06-01

In re Application of:

Wenhua Lin

Serial No.:

09/872,473

Filed:

June 1, 2001

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Group No.: 2874

Examiner: Unknown

Docket No. LIGHT1960

For: TUNABLE DISPERSION COMPENSATOR

CERTIFICATION UNDER 37 CFR § 1.8

8 Tanyary 2002

Washington, D.C. 20231

Signature

Assistant Commissioner for Patents

Sir:

INFORMATION DISCLOSURE STATEMENT

Applicant hereby cites the documents listed in accompany Form PTO-1449 with respect to the above-referenced patent application under the provisions of 37 CFR 1.97(b). Copies of the documents are attached.

The Examiner is respectfully requested to make the listed documents of record in connection with the prosecution of the subject application.

Respectfully submitted,

Date: & January 2002

TERRANCE A. MEADOR Attorney for Applicant(s)

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Substitute for form 1449AIPTO		Application Number	09/872,473	OLB			
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				First Named Inventor	Lin		
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		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published	T6
V	26	AMANN, M.C. et al, Calculation Of The Effective Refractive-Index Step For The Metal-Cladded-Ridge-Waveguide Laser, Applied Optics, VOL 20, No.8, Apr 15 1981, pg 1483-1486	1
U	27	BABA, S. et al., A Novel Integrated-Twin-Guide (ITG) Optical Switch with a Built-in TIR Region; IEEE Photonics Technology Letters; VOL 4, No.5, May 1992, pg 486-488	
V	28	BENSON, T.M., Etched-Wall Bent-Guide Structure for Integrated Optics in the III-V Semiconductors; Journal of Lightwave Technology, VOL LT-2, No.1, Feb 1984; pg 31-34	1.
V	30	BERRY, G.M. et al., Analysis Of Multiplayer Semiconductor Rib Waveguides With High Refractive Index Substrates, Electronics Letters; VOL 29, No.22; Oct 28 1993, pg 1941-1942	
V	31	BETTY, I. et al., A Robust, Low-Crosstalk, InGaAsP/InP Total-Internal-Reflection Switch For Optical Cross-Connect Application	•
V	/32	BURKE, S.V., Spectral Index Method Applied to Coupled Rib Waveguides; Electronics Letters, VOL 25, No.9, Apr 27 1989, pg 605-606	1,
1	33	BURNS, W.K. et al., Mode Conversion in Planar-Dielectric Separating Waveguides; IEEE Journal of Quantum Electronics, VOL QE-11, No.1, Jan 1975; pg 32-39	
V	34	CAI, Y. et al., A Novel Three-Guide Optical Coupler Using A Taper-Formed Waveguide; j. Appl. Phys 69(5), Mar 1991; pg 2810-2814	
1	35	CAVAILLES, J.A. et al., First Digital Optical Switch Based on InP/GalnAsP Double Heterostructure Waveguides; Electronics Letters, VOL 27, No.9, Apr 25 1991, pg 699-700	1.
	36	CHEN, R.T. et al., Design and Manufacturing of WDM Devices; Proceedings of SPIE VOL 3234	٠,
V	37	CLEMENS, et al., Wavelength-Adaptable Optical Phased Array in SiO ₂ -Si, Photonics Technology Letters, October 1995, Vol. 7-No 10, 1040-1041.	•
V	38	DAGLI, N. et al., Analysis of Rib Dielectric Waveguides; IEEE Journal of Quantum Electronics, VOL QE-21, No.4, Apr 1985, Pg 315-321	•
	39	DAGLI, N. et al., Theoretical and Experimental Study of the Analysis and Modeling of Integrated Optical Components; IEEE Journal of Quantum electronics, VOL 24, No.11, November 1988; pg 2215-2226	
i	40	DERI, R.J., et al., Low-Loss GaAs/AlGaAs Waveguide Phase Modulator Using A W- Shaped Index Profile; Sep 6 1988	
	41	DERI, R.J., et al., Low-Loss Multiple Quantum Well GalnAs/InP Optical Waveguides; Feb 21, 1989	•
V	42	DEVAUX, F. et al., 20Gbit/s Operation of a High-Efficiency InGaAsP/InGaAsP MQW Electroabsorption Modulator With 1.2-V Drive Voltage; IEEE Photonics Technology Letters, VOL 5, No.11, Nov 1993, pg 1288-1290	١
/	43	DOERR, C.R. et al., Chirping Of The Waveguide Grating Router For Free-Spectral-Range Mode Selection In The Multifrequency Laser, IEEE Photonics Technology Letters, April 1996, Vol. 8-No. 4, pp 500-502	
V	44	DOERR, C.R. et al., Chromatic Focal lane Displacement in the Parabolic Chirped Waveguide Grating Router, May 1997, Vol. 9-No. 5, pp 625-627	
	45	DRAGONE, c. Efficient NxN Star Couplers Using Fourier Optics, pp 479-48, March 1989, Vol. 7-No. 3, Journal of Lightwave Technology	
	46	FISCHER, et al., Singlemode Optical Switches Based on SOI Waveguides with Large Cross-Section, Electronics Letters, March 3, 1994, Vol. 30-No.5, pp. 406-408.	
- <i>i</i> /	47	FISCHER, K. et al, Sensor Application Of SiON Integrated Optical Waveguides On Silicon; Elevier Sequoia, 1992; pg 209-213	,
V	48	FISH, G. et al., Monolithic InP Optical Crossconnects: 4x4 and Beyond, JWB2-1, Pg 19-21	
L	49	FURUTA, H. et al, Novel Optical Waveguide For Integrated Optics, Applied Optics, VOL. 13, NO. 2, Feb. 1974, pg. 322-326	•
V	50	GINI, E. et al., Low Loss Self-Aligned Optical Waveguide Corner Mirrors in InGaAsP/InP, We P2.22	1.
V	51	GOEL, K. et al Design Considerations for Low Switching Voltage Crossing Channel Switches; Journal of Lightwave Technology, VOL 6, No.6, June 1988; pg 881-886	

Examiner Signature	Date Considered	

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				U.S. PATENT DOCUME	VTS	
Examiner Initials*		U.S. Patent Document		Name of Patentee or Applicant	Date of Publication	Pages, Columns, Lines, Where
	Cite No.1	Number	Kind Code ² (If known)	of Cited Document	of Cited Document MM-DD-YYYY	Relevant Passages or Relevant Figures Appear
	1	4,618,210		Kondo	10-21-1986	
	2	4,747,654		Yi-Yan	03-31-1988	
	3	4,813,757		Sakano et al.	03-21-1989	
	4	4,846,542		Okayama	07-11-1989	
	5	5,002,350		Dragone	03-26-1991	
	6	5,013,113		Soref	05-07-1991	
	7	5,039,993		Dragone	08-13-1991	
	8	5,243,672		Dragone	09-07-1993	
	9	5,412,744		Dragone	05-02-1995	
	10	5,450,511		Dragone	09-12-1995	
	11	5,467,418		Dragone	11-14-1995	
	12	5,581,643		Wu	12-03-1996	
	13	5,706,377		Li	01-06-1998	
····	14	5,841,931		Foresi et. al.	11-24-1998	
	15	5,938,811		Greene	08-17-1999	
· · · · · · · · · · · · · · · · · · ·	16	6,108,478		Harpon et al.	08-22-2000	
	17	6,118,909		Chen et al.	09-12-2000	

				1	OREIGN PATENT DOCUMENT	rs		
Examiner	Cite	F	oreign Patent Do	cument	Name of Detentes or Applicant	Date of Publication	Pages, Columns, Lines,	
Initials*	No.1	Office ³	Number ⁴	Kind Code⁵ (If known)	Name of Patentee or Applicant of Cited Document	of Cited Document MM-DD-YYYY	Where Relevant Passages or Relevant Figures Appear	Т6
	18	EPO	0647861A1		AT&T Corp.	12.04.1995		
	19	EPO	0985942A2		Lucent Technologies, Inc.	15.03.2000		
V	20	Japan	2-179621		Oki Electric Ind. Co. Ltd.	12.7.1990		
V	21	Japan	6-186598		Hitachi Ltd.	8.7.1994		-
	22	Japan	63-197923	i	NEC Corp.	16.8.1988	<u> </u>	

OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS							
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V	23	ABE, et al., Optical Path Length Trimming Technique using Thin Film Heaters for Silica-Based Waveguides on Si, Electronics Letters, September 12, 1996, Vol. 32-No. 19, pp. 1818-1820.	•				
L	24	ALBERT, J., Planar Fresnel Lens Photoimprinted in a Germanium-Doped Silica Optical Waveguide, Optics Letters, May 15, 1995, Vol. 20-No. 10, pp 1136-1138	,				
V	25	AMAN, M.C., Calculation of Metal-Clad Ridge-Waveguide (MCRW) Laser Modes by Mode Coupling Technique, Journal of Lightwave Technology, VOL LT-4, No.6, June 1986, pg 689-693					

Examiner Signature	Date Considered	

^{*}EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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52 GRANESTRAND, P. et al., Integrated Optics 4x4 Switch Matrix with Digital	Optical Switches; Electronics Letters, VOL 26, No.1, Jan 4, 1990; pg 4-5
HIMENO, A. et al., Loss Measurement and Analysis of High-Silica Reflect January 1988, Vol. 6-No. 1, 41-46.	on Bending Optical Waveguides, Journal of Lightwave Technology,
HSU, K.Y. et al., Photonics devices and Modules, www.cc.nctu.edu.tw/~c	flee mti/research topic/photonic devices modules.htm, pp 1-3.
HUANG, T.C. et al., Depletion Edge Translation Waveguide Crossing Opt pg 168-170	eal Switch; IEEE Photonics Technology Letters; VOL 1, No.7, Jul 1989,
HUTCHESON, L.D. et al., Comparison of Bending Losses in Integrated O	
57 INOUE, H. et al, Low Loss GaAs Optical Waveguides, Journal of Lightwar	
IRACE, A. et al., Fast Silicon-on-Silicon Optoelectronic Router Based on a January/February 2000, Vol. 6-No. 1, pp. 14-18.	BMFET Device, Journal of Selected Topics in Quantum Electronics,
1TO, F. et al., Carrier-Injection-Type Optical Switch In GaAs With A 1.06-1 134-136	55 µm Wavelength Range; Appl. Physics Letters, 54(2) Jan 9, 1989; pg
JACKMAN, N. et al., Optical Cross Connects for Optical Networking, Bell	abs Technical Journal, Jan-Mar. 1999; pg 262-281
JOHNSTON, I.R., et al., Silicon-Based Fabrication Process For Production 1996, pg 37-40	Of Optical Waveguides; IEE Proc-Optoelectron., VOL 143, No.1, Feb
62 KAENKO, A. et al., Athermal Silica-based Arrayed-waveguide Grating (AV	G) Multiplexers with New Low Loss Groove Design; TuO1-1, pg 204-206 .
KASAHARA, R. et al., Low-Power Consumption Slica-Based 2x2 Thermo Technology Letters, VOL 11, No. 9, Sep 1999, pg 1132-1134	otic Switch Using Trenched Silicon Substrate, IEEE Photonics
KHAN, M.N. et al., Fabrication-Tolerant, Low-Loss, and High-Speed Digital Opt.Comm.(ECOC '95-Brussels), pg 103-106	Optical Switches in InGaAsP/InP Quantum Wells; Proc 21st Eur.Conf.on
65 KHAN, M.N. et al., High-Speed Operation of Quantum Well Electron Trans	er Digital Optical Switches; pg 102-102c
KIRIHARA, T. et al., Lossless And Low Crosstalk 4x4 Optical Switch Arraj 1994, pg 73-81	Electronics And Communications In Japan, Part 2, VOL 77, No.11,
KIRIHARA, T. et al., Lossless and Low-Crosstalk Characteristics in an InF No. 9 Sept 1993, pg 1059-1061	Based 2x2 Optical Switch, IEEE Photonics Technology Letters, VOL 5,
KOKUBUN, Y. et al., Athermal Waveguides for Temperature-Independent Photonics Technology Letters.	ightwave Devices, November 1993, 1297-1298, Vol. 5-NO. 11, IEEE
KOKUBUN, Y. et al., Temperature-Independent Narrowband Optical Fitter Vol. 32-No. 21, Electronics Letters	at 1.3 µm Wavelength by an Athermal Waveguide, 10th October 1996,
KOKUBUN, Y. et al., Temperature-Independent Optical Filter at 1.55 μm Vol. 34-No. 4, Electronics Letters	aveguide Using a Silica-Based Athermal Waveguide, 19 February 1998,
71 KOKUBUN, Y. et al., Three-Dimensional Athermal Waveguides for Tempe Electronics Letters	ature Independent Lightwave Devices, 21 st July 1994, Vol. 30-No. 15,
KOSTRZEWA, C. et al., Tunable Polymer Optical Add/Drop Filter for Multi Vol. 9-No. 11, 1487-1489.	vavelength Networks, Photonics Technology Letters, November 1997,
73 LAAKMAN, K. D. et al., Waveguides: Characteristic Modes Of Hollow Rec. 1976; pg 1334-1340.	angular Dielectric Waveguides; Applied Optics, VOL 15, No. 5, May

Examiner Signature		Date Considered	
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		OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS	
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V	24	LEE, T.P. et al., Al, Ga1. As Double-Heterostructure Rib-Waveguide Injection Laser, IEEE Journal of Quantum Electronics; VOL QE-11, No.7, July 1975; pg 432-435	`
	75	LIU, Y.L. et al., Silicon 1x2 Digital Optical Switch Using Plasma Dispersion; Electronics Letters, VOL 30, No.2, Jan20, 1994; pg 130-131	Ţ-
	78	MAK, G. et al., High-Speed Bulk InGaAsP-InP Electroabsorption Modulators with Bandwidth in Excess of 20 GHz, IEEE Photonics Technology Letter, VOL 2, No.10, Oct 1990, pg 730-733	1.
	77	MARCATILI, E., Improved Coupled-Mode Equations for Dielectric Guides; IEEE Journal of Quantum Electronics, VOL QE-22, No.6, June 1986; pg 988-993	
	18	MARCATILI, E.A.J., Bends in Optical Dielectric Guides; The Bell System Technical Journal, Sep 1969; pg 2103-2132	·
V	/ 9	MARCATILI, E.A.J., Dielectric Rectangular Waveguide and Directional Coupler for Integrated Optics, The Bell System Technical Journal, Sept 1969 pg 2071-2101	
W	80	MARCATILI, E.A.J., Slab-Coupled Waveguides; The Bell System Technical Journal, April 1974; American Telephone & Telegraph Company, VOL 53, No.4, April 1974	
	7 81	MIRZA, A.R. et al, Silicon Wafer Bonding For MEMS Manufacturing, Solid State Technology, Aug 1999, pg 73-78	
1/	82	MOERMAN, I. et al., A Review on Fabrication Technologies for the Monolithic Integration of Tapers with III-V Semiconductor Devices; IEEE Journal of Selected Topics in Quantum electronics, VOL 3, No.6, Dec. 1997, pg 1308-1320	
V	83	MÜLLER, G. et al., First Low Loss InP/InGaAsP Optical Switch with Integrated Mode Transformers; ThC12.10; Pg 37-40	3
	84	NAYYER, J. et al., Analysis of Reflection-Type Optical Switches with Intersecting Waveguides, Journal of Lightwave Technology, VOL 6, No.6, June 1988; pg 1146-1152	,
1	85	NEGAMI, t. et al., Guided-Wave Optical Wavelength Demultiplexer Using An Asymmetric Y Junction; Appl. Phys. Lett. 54 (12), Mar 20, 1989; pg 1080-1082	
	86	NELSON, W. et al., Optical Switching Expands Communications-Network Capacity; Laser Focus World, Jun 1994, pg 517-520	
	87	NELSON, W.H. et al., Wavelength-and Polarization-Independent Large Angle InP/InGaAsP Digital Optical Switches with Extinction Ratios Exceeding 20 dB; IEEE Photonics Technology Letters, VOL 6, No.11, Nov. 1994; pg 1332-1334	
	88	NODA, Y. et al., High-Speed Electroabsorption Modulator with Strip-Loaded GalnAsP Planar Waveguide; Journal of Lightwave Technology, VOL LT-4, No.10, Oct 1986, pg 1445-1453	
V	89	OFFREIN, B.J. et al., Resonant Coupler-Based Tunable Add-After-Drop Filter in Silicon-Oxynitride Technology for WDM Networks, Journal of Selected Topics in Quantum Electronics, Vol. 5-No. 5, 1400-1405.	•
$-\nu$	90	OKAMOTO, K. et al., Arrayed-Waveguide Grating Multiplexer With Flat Spectral Response; Optics Letters, Jan 1 1995; VOL 20, No.1; Pg 43-45	
V	91	OKAMOTO, K. et al., Flat Spectreal Response Arrayed-Waveguide Grating Multiplexer with Parabolic Waveguide Horns, Electronics Letters Online, July 15, 1996, No. 19961120, pp. 1661-1662.	
	92	OKAYAMA, H. et al., 8x8 Ti:LiNbO ₃ Waveguide Digital Optical Switch Matrix, IEICE Trans. Commun.; VOL E77-B, No.2; Feb. 1944; pg 204-208	
_	93	OKAYAMA, H. et al., <u>Dynamic Wavelength Selective Add/Drop Node Comprising Tunable Gratings, Electronics Letters Online</u> , April 10, 1997, No. 19970607.	
V	94	OKAYAMA, H. et al., Reduction of Voltage-Length Product for Y-Branch Digital Optical Switch, Journal of Lightwave Technology, VOL 11, No.2, Feb 1993; pg 379-387	,
	95	OKUNO, M. et al., Strictly Nonblocking 16x16 Matrix Switch Using Silica Based Planar Lightwave Circuits, VOL 10, No.266, Sep 11, 1986	,
1	96	OOBA, N. et al., Athermal Silica-Based Arrayed-Waveguide Grating Multiplexer Using Bimetal Plate Temperature Compensator, Electronics Letters, 12th October 2000, Vol. 36, No. 21, pp 1800-1801	,

Examiner Signature		Date Considered		
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EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

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OTHER PRIOR ART - NON PATENT LITERATURE DOCUMENTS								
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Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published						
V	97	RENAUD, M. et al., Compact Digital Optical Switches for Low Insertion Loss Large Switch Arrays on InP, Proc. 21 st Eur.Conf.on Opt. Comm. (ECOC '95-Brussels), pg 99-102						
	98	RICKMAN, A.G. et al., Silicon-on-Insulator Optical Rib Waveguide Loss and Mode Characteristics, Journal of Lightwave Technology, October 1994, Vol. 12-No. 10, pp 1771-1776						
~	99 ROLLAND, C. et al., 10 Gbit/s, 1.56 µm, Multiquantum Well InP/InGaAsP Mach-Zehnder Optical Modulator, Electronics Letters, Mar 4, 1993, VOL 29, No.5, pg 471-472							
2	100	Santec Sales Brochure for year 2000 entitled "Optical Components"	P					
V	101	SCHAUWECKER, B. et al, Small-Size Silicon-Oxynitride AWG Demultiplexer Operating Around 725 nm, IEEE Photonics Technology Letters, Vol. 12 No. 12, December 2000						
1	102	SCHLACHETZKI, A. Monolithic IO-Technology-Modulators and Switches Based on InP, SPIE VOL 651 Integrated Optical Circuit Engineering III (1986), pg 60-86	•					
	103	SILBERBERG, Y. et al., Digital Optical Switch; Appl. Phys. Lett.; VOL 51, No.16, Oct 19, 1987, pg 152-154	ŝ					
2	104	SMIT, M.K., New Focusing and Dispersive Planar Component Based on an Optical Phased Array; Electronics Letters; Mar 31, 1988, VOL 24, No.7; Pg 385-386	,					
V	105	SMITH, S.D. et al., CW Operation of Corner Cavity Semiconductor Lasers; IEEE Photonics Technology Letters, VOL 5, No.8, Aug 1993; pg 876-879						
-	106	SNEH, A. et al., Compact Low Crosstalk and Low Propagation Loss Quantum-Well Y-Branch Switches; PDP 4-1 ~ 4-5	•					
L	107	SOOLE, J.B.D. et al., Use of Multimode Interference Couplers to Broaden the Passband of Wavelength-Dispersive Integrated WDM Filters; IEEE Photonics Technology Letters, VOL 8, No.10, Oct 1996; pg 1340-1342	·					
V	108	STOLL, L. et al., 1:8 Optical Matrix Switch on InP/InGaAsP with Integrated Mode Transformers; Optical Switches and Modulators II, pg 531-534	7.					
	109	STOLL, L. et al., Compact and Polarization Independent Optical Switch on InP/InGaAsP; TuB7.2; pg 337-340	_,					
	110	- STUTIUS, W. et al, Silicon Nitride Films On Silicon For Optical Waveguides, Applied Optics, VOL 16, No.12, Dec 1977, pg 303-307	•					
<u></u>	111	SUGIE, T. et al.,1.3-µm Laser Diodes with a Butt-jointed Selectively Grown Spot-Size Converter, ThB2-6, IOOC95, pg 52-53	1					
V	112	TADA, K. et al., Bipolar Transistor Carrier-Injected Optical Modulator/Switch: Proposal and Analysis, IEEE Electron Device Letters, VOL EDL-7, No.11, Nov 1986, pg 605-606	,					
V	113	TAKADA, et al., Optical Spectrum analyzer using Cascaded AWG's with Different Channel Spacings, Photonics Technology Letters, July 1999, Vol. 11, No. 7, pp. 863-864.						
	114	TAKAHASHI, H. et al., Arrayed Waveguide Grating for Wavelength Division Multi/Demultilexer with Nanometre Resolution, PWG-NTT-7						
Ĭ	115	TAKIGUCHI, K. et al, Dispersion Compensation Using a Planar Lightwave Circuit Optical Equalizer, Photonics Technology Letters, April 1994, Vol. 6, No. 4, pp. 561-564.						
	116	TIEN, P.K. et al., Formation of Light-Guiding Interconnections in an Integrated Optical Circuit by Composite Tapered-Film Coupling; Applied Optics, VOL 12, No. 8, Aug 1973; pg 1909-1916						
1/	117	TOYODA et al., Thermoplastic Switch and Wavelength Tunable Filter using Polymer Waveguides, Abstract of paper presented at Opticomm 2001 on August 22, 2001.						
1	118	TREYZ, G.V. et al., Silicon Optical Modulators at 1.3 µm Based on Free-Carrier Absorption; IEEE Electron Device Letters, VOL 12, No.6, June 1991; pg 276-278						
	119	TSUDA, H. et al., Performance Analysis of a Dispersion Compensator Using Arrayed-Waveguide Gratings, Journal of Lightwave Technology, August 2000, Vol. 18-No.8, pp 1139-1147.						

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Examiner Signature	Date Considered	Examiner Signature	

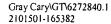
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Photonics	tion Arrayed Waveguide Grating, IEEE Photonics	pensator Using a High	d Third-Order Dispersion Cor 9, Vol. 11-No. 5, 569-571.			120	U		
est, Thursday	ect Applications; OFC '95 Technical Digest, Thursday	Multiwavelength Cross	ital-Optical-Switch Module Fo		VINCHANT et ThK2, pg 281-2	121	V		
VINCHANT, J.F. et al., First Polarisation insensitive 4x4 Switch matrix on InP with Digital Optical Switches, TuB7.3, pg 341-344									
VINCHANT, J.F. et al., InP Digital Optical Switch: Key Element for Guided- Wave Photonic Switching; IEE Proceedings-J, VOL 140, No.5, Oct 1993; pg 301-307							1		
VINCHANT, J.F. et al., Low Driving Voltage or Current Digital Optical Switch on InP for Multiwavelength System Applications; Electronics Letters, VOL 28, No.12, Jun 4, 1992; pg 1135-1137							·		
WAKITA, K. et al., Long Wavelength Waveguide Multiple Quantum Well Optical Modulators; IEEE Journal of Quantum Electronics, VOL QE-23, No.12, Dec 1987, pg 2210-2215							i		
WANRU, Z. et al., Total Internal Reflection Optical Switch with Injection Region Isolated by Oxygen Ion Implantation; pg 1-10						26	L		
YAMADA, et al., Cross Talk Reduction in a 10 GHz Spacing Arrayed-Waveguide Grating by Phase-Error Compensation, Journal of Lightwave Technology, March 1998, Vol. 16-No. 3, pp. 364-371.							V		
YANAGAWA, H. et al., Polarization-and Wavelength-Insensitive Guided-Wave Optical Switch with Semiconductor Y Junction, Journal of Lightwave Technology, VOL 8, No.8, Aug 1990, pg 1192-1197							V		
YU, S. et al., High Speed All-Optical Packet Routing Using A Vertical Coupler Crosspoint Space Switch									
YU, S. et al., Ultralow Cross-Talk, compact integrated optical crosspoint space switch arrays employing active InGaAsP/InP Vertical Waveguide Couplers, Integrated Optical Crosspoint Switch Απαγς, Siyuan Yu et a, CPD24-2							~		
ZENGERLE, R. et al., Tapered Twin Waveguides For Spot-Size Transformation In InP, TheB2-5; IOOC 95; pg 50-51						131			
ZIRNGIBL, M. et al., Digitally Tunable Laser Based On The Integration Of A Waveguide Grating Multiplexer And An Optical Amplifier, IEEE Photonics Technology Letters, April 1994, Vol. 6-No. 4, pp 516-517						132	_		
ZUCKER, J.E. et al., Strained Quantum Wells for Polarization-Independent Electrooptic Waveguide Switches, Journal of Lightwave Technology, VOL 10, No.12, Dec 1992, pg 1926-1930						133	2		
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Examiner Signature	Date Considered	
	 	

¹Unique citation designation number. ²See attached Kinds of U.S. Patent Documents. ³Enter Office that issued the document, by the two letter-code (WIPO Standard ST.3). ⁴For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. ⁵Kind of document by the appropriate symbols as indicated on the document under WIPO Standard St. 16 if possible. ⁶Applicant is to place a check mark here if English language translation is attached.



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